



Career and Technical Education: Preparing Students for the 21st Century

U. S. Department of Education
Office of Vocational and Adult Education
Division of Academic and Technical Education

Career Clusters and Programs of Study

The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) envisions that all students will achieve challenging academic and technical standards and be prepared for high-skill, high-wage, or high-demand occupations in current or emerging professions in the 21st century global economy. To this end, Perkins IV requires states to offer "career and technical programs of study" that comprise academic, career, and technical content that prepares students to make successful transitions to postsecondary education and the workplace. Under Perkins IV, local education agencies and postsecondary institutions must offer at least one program of study that:

- Incorporates secondary education and postsecondary education elements;
- Includes coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary to postsecondary education;
- May include opportunity for secondary education students to gain postsecondary education credits through dual or concurrent enrollment programs or other means; and
- Leads to an industry-recognized credential or certificate at the postsecondary level or an associate or baccalaureate degree.

States may, but are not required to, develop and implement career and technical programs of study in one or more of 16 career clusters that are recognized by the Office of Vocational and Adult Education (OVAE) and the National Association for State Directors of Career Technical Education Consortium (NASDCTEC). The 16 career clusters are occupational categories with industry-validated knowledge and skills statements that define what students need to know and be able to do in order to realize success in a chosen field. Within each of the clusters, programs of study (also called "career pathways") have been developed, which outline sequences of academic, career, and technical courses and training that begin as early as ninth grade and lead to progressively higher levels of education and higher-skilled positions in specific industries or occupations.

16 Career Clusters

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, A/V and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections, and Security
- Manufacturing
- Marketing, Sales, and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution and Logistics

Resources and Tools You Can Use

- A Web site that offers a variety of downloadable resources including brochures, knowledge and skills statements, and 81 plans of study for the 16 career clusters.

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Web Site *State's Career Clusters Initiative* – <http://www.careerclusters.org>